DISCONNECT DOWNSPOUTS & INSTALL RAIN BARRELS

City of St. Louis Sustainable Neighborhood Initiative



DESCRIPTION

Downspouts connect directly to the combined sewer system, and during rain events, water can overwhelm the sewer system and cause pollution and wastewater overflow. Disconnecting downspouts and redirecting water is a small but effective way to greatly reduce the amount of water flowing into the sewer. Rain barrels are a common, 'low-tech,' and low cost way to capture water that would otherwise need to be drained and would go unused. Rain barrels are placed beneath a gutter or downspout and capture rainwater during storm events. The captured water can then be used for garden irrigation, washing your car, or other non-potable uses.

NEIGHBORHOOD BENEFITS

Environmental

- Reduced pollutant run-off caused by wastewater overflow
- Reduced downstream flow to wastewater treatment plants
- Replenished groundwater supply from rainwater
- Reduced water demand
- Energy savings

Social

- Increased awareness of water and energy conservation
- Reduced stormwater overflow and chances of flooding
- Reduced risk of basement backup and sewer overflow

Economic

- Free water for non-potable uses
- Reduced lawn and garden upkeep costs because rain water is heathier for plants than tap water
- Fewer overflowing sewers reduce risk of incurring EPA fines





RELATED TOOLS

When paired with other tools, disconnecting downspouts and installing rain barrels can contribute to a more connected, prouder, and more marketable community. Think about community cohesion, public art, local prosperity, and healthy vibrant communities. Try combining this tool with:

- Establish a Community Garden or Local Food Installation
- Use Native Plants for Habitat or Biodiversity
- Convert Hardscape Areas to Pervious Surfaces
- Install Rain Gardens and Bioswales

EXAMPLES

University City Free Rain Barrel Program, University City, MOUses a federal grant to provide free rain barrels to University City residents.

RainScaping Rewards Rebate Program, Brentwood, MO

Assists homeowners in landscaping their property for stormwater runoff.

ArtWork Hand Painted Rain Barrel Teen Apprenticeship Program, St. Louis, MOProvides inexpensive rain barrels painted by aspiring teenage designers.





GET STARTED

- Research Contact local organizations that already have disconnected downspout and rain barrel programs in place, and see if they can direct you to local sources of materials. See MSD, the River des Peres Watershed Coalition, and the Mid-America Regional Council. Search for businesses and restaurants that are disposing of food-grade storage barrels that could be re-purposed into rain barrels.
- **2. Organize** Speak with your neighborhood association leaders and possibly present your ideas at a public meeting.
- 3. Buying Complete rain barrel systems cost around \$150. Discounts may be available for bulk purchases or for non-profit groups. Funding may also be available through green implementation grants through organizations such as River Des Peres Watersend Coalition, Deer Creek Watershed Alliance, Missouri Botanical Garden, MSD Project Clear, and Earth Day. Annual sales for rain barrels are usually held in Spring and Summer and offer discount pricing.
- Gather Volunteers & Participants Search for homeowners wanting to participate and volunteers willing to assist residents in installation.
- 5. Work Hold a workday to disconnect downspouts, install rain barrels, and rain gardens to handle water flow from disconnected downspouts to ensure that rainwater can be absorbed into the ground without causing erosion. Rain barrels may need to have spigots and overflow valves installed and be sealed from mosquitoes and other insects. Be sure barrels are free of contaminants that might pollute rainwater or damage plants.
- **6. Use Rainwater** Rainwater should never be used as drinking water for pets or people. It can be used to wash cars, water lawns and gardens, and to clean exterior surfaces.
- 7. **Maintain** Disconnected downspouts and rain barrels require yearly maintenance to remove debris. During winter, it may be necessary to disconnect your rain barrel to prevent freezing and damage.

OPPORTUNITIES

- 1. **Decorate** Have neighborhood volunteers of all ages decorate rain barrels or plant greenery around barrels to handle rainwater overflow and to add a defining character to your neighborhood. To raise community excitement for your program, consider hosting a competition for the most beautiful rain barrel on the block.
- 2. Market Share information about these rainwater strategies to your neighbors at Neighborhood Association and other public meetings. Try finding new, creative ways of using water from disconnected downspouts and rain barrels.
- **3. Track Progress** Track your water savings and share knowledge to encourage neighbors to participate.



RELATED SUSTAINABILITY PLAN CATEGORIES

This tool supports the following goals and strategies:

Urban Character, Vitality & Ecology

Strategies E3-Restore, clean, and activate the City's waterways;

Infrastructure, Facilities & Transportation

Strategies: E2-Incorporate green infrastructure practices; E3-Use pilot projects to explore ways to achieve net zero stormwater discharge; E4-Reduce wastewater treatment loads and divert wastewater treatment sludge from landfills; F2-Advance responsible water use; F4-Encourage limits on outdoor potable water consumption.

Education, Training & Leadership

Strategies: E1-Educated and empower citizens in methods and benefits of being environmentally sustainable.

For the most current examples, updated tools, and information, visit the City's Sustainable Neighborhood Initiative website:

SUSTAINABLENEIGHBORHOOD.NET